

CLAIMS:

1. A message for transmission through a wireless cellular communication network, with a syntax that comprises:
  - 5       a header part for defining sender/receiver message nature;
  - an identification part for identifying the service;
  - a landmark part for containing location information of one or more objects; and
  - 10       a provisioning part for indicating a desired service.
2. A message according to claim 1, in which the header part has a message-type section comprising:
  - 15       a message-keyword field for indicating a message from mobile phone to server or from server to mobile phone;
  - a request-keyword for indicating that the message is a request; and
  - a response-keyword for indicating that the message is a response.
- 20       3. A message according to claim 1 or 2, in which the header part has a location-type identifier section comprising:
  - a current-keyword field for indicating the use of the current location of the mobile phone; and/or
  - 25       a landmark-keyword field for exchanging stored landmarks; and/or
  - a privacy-keyword field for an application-keyword for accessing network applications; and/or
  - a provisioning-keyword for indicating the desired services and belonging parameters.
- 30       4. A message according to any of claims 1 to 3, in which the identification part comprises:
  - 35       an origin-msisdn field for indicating the phone number of the phone or server sending the message; and/or

a target-msisdn field for indicating the phone number of the destination of the message; and/or  
a user-text field for containing free text entered by a user; and/or  
5 a service-name and/or a service-description field for containing a short description of service;  
and/or a service-landmark field for indicating the number of landmarks to be provided to the service;  
and/or  
10 a service-parameter field for indicating the service as defined by provisioning; and/or  
a privacy-status field for indicating privacy requests.

15 5. A message according to any of claims 1 to 4, in which the landmark part has a landmark field for indicating the beginning of the objection location indicator, and a coordinate-part comprising:

a coordinate field for storing the coordinates of  
20 the object as latitude and longitude, preferably in WGS84 or other suitable format; and/or  
a name field for containing the name of the object;  
and/or  
an accuracy field for indicating the coordinate  
25 accuracy, a date field for containing date and time of the location determination; and/or  
a source field for containing the location source;  
and/or  
a position of MSISDN field for containing the MSISDN  
30 associated to the object.

6. A message according to any of claims 1 to 5, in which the landmark part has a geocode part comprising:

a street-name-field for containing a street name;  
and/or  
a street-number-field for containing a street  
address number; and/or  
5 a zip-field for containing a zip or postal code;  
and/or  
a town-field for containing a town name; and/or  
a state-field for containing a state or province  
name; and/or  
10 a country-field for containing a country name;  
and/or  
a building-name-field for containing a name of a  
building; and/or  
a building-floor-field for containing a building  
15 floor number; and/or  
a district-field for containing a name of a  
district.

7. A message according to any of claims 1 to 6, in which  
20 the landmark part has an extra-info part comprising:  
an URL-field for containing an URL associated to the  
object; and/or  
a bitmap-field for containing an URL of a bitmap  
associated to the object; and/or  
25 a category-field for containing a category  
associated to the landmark.

8. A message according to any of claims 1 to 7, in which  
the provisioning part has an SMSC-part comprising:  
30 an SMSC number field for containing an SMSC phone  
number; and/or  
an APPS number field for containing an APPS number to  
which to send messages to reach LMSC.

9. A message according to any of claims 1 to 8, in which the provisioning part has a service-part comprising:

- 5 a service-name field for containing a name of a service; and/or
- a service-parameter field for containing parameters or subnames of services; and/or
- a service-landmark field for containing the number of landmark required for the service; and/or
- 10 a service-description field for containing a description of a service.

10. A method for handling landmarks on a mobile communication terminal, said mobile communication terminal  
15 having means for receiving messages via a communication channel, an application for handling incoming messages that is capable of detecting messages containing a landmark, and a register for storing landmarks comprising:

- 20 reception of a message including at least one landmark from a remote terminal, and storing said at least one landmark in said landmark register.

11. A method according to claim 10, in which said at least one landmark is provided with an associated category,  
25 comprising saving said landmark under the category concerned in the landmark register.

12. A method according to claim 10, in which said at least one landmark is not provided with an associated category,  
30 comprising said mobile communication terminals prompting the user to indicate a category to save the landmark in.

13. A method according to any of claims 10 or 12, in which said message includes bookmark information defining the  
35 location of a server associated with the landmark concerned, preferably a bookmark defining a server document

containing a geographical map of the area of the landmark or an image of the landmark, and preferably comprising said mobile communication terminal providing a shortcut to the received bookmark.

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14. A method according to any of claims 10 to 13, wherein said remote terminal is a server providing location dependent services, preferably a routing service between at least two landmarks or a service for determining the  
10 nearest object in a given category to given landmark and the message contains the retrieved landmarks.

15. A method according to any of claims 10 to 14, wherein said message further comprises accuracy information of the  
15 landmark concerned.

16. A method according to any of claims 10 to 15, wherein the landmark is stored as a latitude and a longitude, preferably in accordance with WGS84.

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17. A method according to any of claims 10 or 16, wherein said message comprises geocode, preferably in the form of a street name, and/or a street address number, and/or a zip or postal code, and/or a town name, and/or a state or  
25 province name, and/or a country name, and/or a name of a building, and/or a building floor, and/or a name of a district associated with the landmark concerned.

18. A method according to any of claims 10 to 17, wherein  
30 the communication terminal allows the user to discard a received message, before of after inspection of landmarks included in the message.

19. A method according to any of claims 10 to 18, in which  
35 the received message has a format in accordance with any of claims 1 to 9.

20. A method for handling landmarks on a mobile communication terminal, said mobile communication terminal having means for receiving messages via a communication  
5 channel, an application for handling incoming messages that is capable of detecting messages that contain a landmark related service request comprising:

reception of a message including at least one landmark related service request from a remote terminal, and said  
10 mobile communication terminal prompting the user to grant permission to reply to the request.

21. A method according to claim 20, wherein said service request is a request for providing the present landmark of  
15 the mobile communication terminal to the remote terminal

22. A method according to claim 21, comprising said mobile terminal replying by sending a message with a request denial when the user instructs the mobile communication  
20 terminal to deny the request.

23. A method according to claim 21, comprising said mobile terminal replying by sending a message including the present landmark of the mobile communication terminal when  
25 the user instructs the mobile communication terminal to grant the request, or sending a message including another landmark stored on the mobile communication terminal when the user instructs the mobile communication terminal to do so.

30 24. A method according any of claims 20 to 23, in which the received message has a format in accordance with any of claims 1 to 9.

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25. A method for handling landmarks on a mobile communication terminal for use in a communication network, said mobile communication terminal having a register for storing landmarks, means for creating messages and sending  
5 these messages via a communication channel to a remote terminal, and an application for handling outgoing messages that is capable of including a landmark in said messages comprising:

10 sending a message including at least one of said stored landmarks via a communication channel to a remote terminal.

26. A method according claim 25, in which the sent message has a format in accordance with any of claims 1 to 9.

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27. A method for handling landmarks on a mobile communication terminal for use in a communication network, said mobile communication terminal having a register for storing landmarks, means for creating messages and sending  
20 these messages via a communication channel to a remote terminal, and an application for handling outgoing messages that is capable of including a service request related to at least one landmark in said messages,

25 comprising sending a message including a service request related to at least one landmark via a communication channel to a remote terminal.

28. A method according to claim 27, wherein said remote terminal is another mobile communication terminal and said  
30 service request is a request to obtain the position of said other terminal.

29. A method according to claim 27, wherein said remote terminal is a server providing location dependent services  
35 and said request is a request to search landmarks in a database based on criteria contained in said message, and

said request comprises at least one landmark, said criteria preferably comprising a distance criterion and a criterion defining the type of landmark to be retrieved.

5 30. A method according to claim 29, wherein said remote terminal is a server providing location dependent services and said request is a request to provide a route from a first landmark to a second landmark and eventually to further landmarks, and said request comprises at least said  
10 first and second landmarks, said message further containing criteria for said route, such as the type of route to be provided, such as a route for pedestrians, a route for cyclists, a route for motorists, or a route for persons using public transport.

15 31. A method according to claim 30, comprising said routing service upon receiving said message determining a route between said at least start first landmark and said second landmark and sending a response message containing the data  
20 describing the determined route to said mobile communication terminal.

32. A method according to claim 31, in which said data describing the determined route comprises text in a natural  
25 language describing the route step by step.

33. A method according any of claims 27 to 32, in which the sent message has a format in accordance with any of claims  
1 to 9.

30 34. A mobile communication terminal for use in a communication network comprising means for receiving messages via a communication channel, and an application handling incoming messages, wherein said application for  
35 handling incoming messages has means for detecting messages that include at least one landmark.



35. A mobile communication terminal according to claim 34,  
wherein said application for handling received messages has  
means for saving landmarks in said mobile communication  
5 terminal, preferably in a dedicated landmark register.

36. A mobile communication terminal according to claim 35,  
wherein said means for saving landmarks in said mobile  
communication terminal is able to store landmarks with an  
10 associated name, and preferably also together with  
additional information associated with the landmark  
concerned.

37. A mobile communication terminal according to claim 35  
15 or 36, wherein said means for saving landmarks is capable  
of categorising landmarks by storing a category name with  
the landmark concerned, and saving landmarks in different  
categories.

20 38. A mobile communication terminal according to any of  
claims 34 to 37, wherein said application for handling  
received messages has means for detecting a service request  
related to a landmark.

25 39. A mobile communication terminal according to any of  
claims 34 to 38, wherein said application for handling  
received messages has means for responding to a service  
request by sending a reply message containing a permission  
to obtain the present location of the mobile communication  
30 terminal or containing at least one location stored in the  
mobile communication terminal.

40. A mobile communication terminal according to any of  
claims 34 to 39, further comprising means for sending  
35 messages via a communication channel and an application to

create messages including landmarks stored in the mobile phone.

41. A mobile communication terminal according to any of  
5 claims 34 to 40, wherein said application to create  
messages has means for including a service request related  
to at least one landmark in the created message.

42. A mobile communication terminal according to claim 41,  
10 wherein said application to create messages has means for  
including parameters for a service request.

43. A mobile communication terminal for use in a  
communication network,  
15 said mobile communication terminal having a register for  
storing landmarks, means for creating messages and sending  
these messages via a communication channel to a remote  
terminal, and an application for handling outgoing messages  
that is capable of including a landmark in said messages.